

REMARKS / DISCUSSION OF ISSUES

Claims 1-8 are presently under substantive examination. Claim 1 is in independent form.

Unless indicated otherwise, claims are amended for non-statutory reasons: to correct one or more informalities, remove figure label number(s), and/or to replace European-style claim phraseology with American-style claim language.

Rejections Under 35 U.S.C. § 103

Claims 1, 4, 5 and 8 were rejected under 35 U.S.C. § 103(a) as being obvious over *Oyama, et al.* and *Ruile, et al.* For at least the reasons set forth below, Applicants respectfully submit that this rejection is improper and should be withdrawn.

At the outset, Applicants rely at least on the following standard of law as it relates to obviousness. Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. While the sequence of these questions might be reordered in any particular case, the factors continue to define the inquiry that controls. If a court, or patent examiner, conducts this analysis and concludes the claimed subject matter was obvious, the claim is invalid or unpatentable under § 103. *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727; 82 U.S.P.Q.2D 1385 (2007), citing, in part *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966).

However, the Court in *KSR* continued: "A factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning. See *Graham*, 383 U.S., at 36, 86 S. Ct. 684, 15 L. Ed. 2d 545 (warning against a "temptation to read into the prior art the teachings of the invention in issue" and instructing courts to "guard against slipping into the use of hindsight" (quoting *Monroe*

Auto Equipment Co. v. Heckethorn Mfg. & Supply Co., 332 F.2d 406, 412 (CA6 1964))).” Moreover, if there is no suggestion to combine the teachings of the applied art, other than the use of Applicants’ invention as a template for its own reconstruction, a rejection for obviousness is improper. *Ex parte Crawford, et al.* Appeal 20062429, May 30, 2007.

The Examiner placed no patentable weight on certain language in the previously presented claim 1, alleging that the language was not a positive limitation. While Applicants by no means concede the discounting of the language in previously presented claims, in the interest of advancing the prosecution of the present application, claim 1 has been amended in a way that renders the issue of positive claim limitations moot. In particular, claim 1 now recites:

“...a resonance circuit, said resonance circuit comprising a resonance frequency (f) determining sensor element or being electrically coupled to a resonance frequency determining sensor element, a remote power transmission element, which receives power and provides electrical power to the device,...

In an embodiment described in connection with Fig. 1 of the filed application, the device (illustratively a biosensor cartridge) 1 is provided with a photodiode 3 as a remote power transmission element. By shining light 2 on the photodiode the device is provided with power. In another embodiment described in connection with Fig. 10 of the filed application, a remote power transmission element comprises a coil 101 forming a part of an RF power receiving element which is arranged to receive power via an RF power signal at a frequency f1. This frequency differs from the RF frequency f2 of the oscillator. By using different **frequency the power signal** does not interfere with the measurement signal.

Clearly, the claims as amended reflect the powering of the device by the receiving of power by the remote power transmission element and its providing of electrical power to the device.

i. Ruille, et al. fails to disclose the remote power transmission element

The Office Action concedes that the reference to *Oyama, et al.* fails to disclose a device comprising a remote power transmission element for receiving a resonant frequency. The Office Action then turns to *Ruile, et al.* in an attempt to cure this defect.

The reference to *Ruile, et al.* is drawn to a radio-interrogated surface waver sensor, in which element 12 is a variable impedance that is electrically connected to a surface wave structure 26. An RF signal 30 is interrogative of the structure 26 and creates surface acoustic waves therein. The element 12 acts as a terminating impedance for an RF voltage. This voltage is produced in the structure 26 by virtue of the acoustic surface wave. Since the electrical impedance of element 12 changes with the amplitude of the surface waves in the structure 26, the terminating impedance of the structure also changes. Thus, element 12 acts as a terminating impedance and is affected by the amplitude of the structure 26.

However, *Ruile, et al.* does not disclose at least the noted features of claim 1. Particularly, the reference does not disclose or suggest the powering of the device by the ***remote power transmission element***, which receives power remotely (e.g., light on a photodiode) and provides electrical power the device. To this end, although the reference discloses little about the radio frequency transmitter and receiver, there is no disclosure of its use as a remote power transmission element as claimed. To this end, the transmitter and receiver are described in the Summary of the Invention of *Ruile, et al.*:

“..a radio frequency transmitter and receiver having transmission and reception antennas and an electronic evaluation device,

the impedance element, which is to be exposed to the effect to be detected by the sensor part, being electrically connected to a surface-wave structure, and the transmitter serving for radio transmission of an interrogation pulse and the receiver, with its evaluation device, serving for radio reception and for qualitative/quantitative evaluation of the change, influenced by the effect, in the impulse response of the surface-wave arrangement.” (Emphasis provided).

Clearly, there is no description of the use of the radio transmitter and receiver of *Ruile, et al.* as a remote **power transmission element** as specifically recited in claim 1.

ii. The claim of inherency is improper

The Examiner states:

Schreiber, 44 USPQ2d 1429 (Fed. Cir. 1997). Further, the remote power transmitter of *Ruile et al.* is a radiofrequency (RF) transmitter and receiver. Therefore, the remote power transmitter of *Ruile et al.* would be capable of providing and receiving electrical power to the device of *Oyama et al.*

Applicants respectfully submit that the Examiner is asserting that the power transmitter of *Ruile, et al.* is capable of and therefore inherently receives and provides electrical power to the sensor of *Oyama, et al.* However, no basis to establish inherency is provided.

M.P.E.P. § 2112 IV provides that:

*EXAMINER MUST PROVIDE RATIONALE OR EVIDENCE TENDING
TO SHOW INHERENCY*

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); In re Oelrich, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). “To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference,’ and that it would be so

recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. " In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999).
(emphasis added).

Furthermore, a claim rejection must be based on objective evidence of record, and cannot be supported merely on subjective belief and unknown authority. See, e.g., M.P.E.P. § 2144.03; In re Lee, 277 F.3d at 1344-45, 61 USPQ2d at 1434-35 (Fed. Cir. 2002); In re Zerko, 258 F.3d at 1386, 59 USPQ2d at 1697.

No such concrete evidence has been provided by the Examiner here, nor did the Examiner submit an affidavit as required by 37 C.F.R. § 1.104(d)(2) to establish the alleged inherency was based on facts within the Examiner's personal knowledge (see M.P.E.P. § 2144.03). Applicants respectfully request that such evidence or an affidavit be provided if a rejection continues to be made without a citation of any objective evidence.

iii. The combination of references is improper

The above notwithstanding, Applicants respectfully submit that the rejection based on *Oyama, et al.* and *Ruile, et al.* is improper because there is no suggestion to combine the teachings of the applied art, other than the use of Applicants' invention as a template for its own reconstruction.

Oyama, et al. is drawn to a method of detecting DNA in a sample. *Ruile, et al.* is drawn to a radio-interrogated SAW sensor. Certain applications disclosed include toll systems and metrology where the measured quantity to be determined in the SAW arrangement causes a change in the propagation time in the acoustic wave. There is no disclosure of a biosensor, the use of the SAW device as a biosensor or in a biosensor, and no disclosure (as discussed above) of a remote power transmission element. Respectfully, the Examiner has cobbled a rejection using Applicants claims as templates

for their own reconstruction when the applied art provides no teaching or suggestion of the need for or function of their combination of references. Therefore, the combination of the references to *Oyama, et al.* and *Ruile, et al.* is improper and renders the rejection improper as well.

For at least the reasons set forth above, Applicants respectfully submit that the rejection of claim 1 and the claims that depend therefrom is improper. As such, Applicants submit that claim 1 and the claims that depend therefrom are patentable over the applied art.

2. Claims 2, 3, 6, 7 and 8 were rejected as being obvious over *Oyama, et al.* and *Ruile, et al.* and tertiary references. These claims depend from claim 1 directly or indirectly. For at least the reasons set forth above, Applicants respectfully submit that these claims are patentable as a matter of law.

Conclusion

In view of the foregoing, applicant(s) respectfully request(s) that the Examiner withdraw the objection(s) and/or rejection(s) of record, allow all the pending claims, and find the application in condition for allowance.

If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted on behalf of:
Phillips Electronics North America Corp.

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